Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for receiving data from a plurality of ports for processing by a plurality of processes, comprising:

assigning, with a scheduler thread, one of the plurality of ports to one of the plurality of processes, with the one of the plurality of processes executing [including] at least one thread;

determining that additional data is available from the assigned port; and

awaiting notification by the one of the plurality of processes that processing of the additional data has been completed prior to re-assigning the port to one of the plurality of processes.

2. (Original) The method of claim 1, further comprising:

determining if data is available from one of the plurality of ports.

3. (Currently Amended) The method of claim 1, wherein assigning further [comprising] comprises:

selecting one of the plurality of processes using the scheduler thread.

4. (Original) The method of claim 3, further comprising:

directing transfer of the data from the assigned port to the one of the plurality of processes for processing.

5. (Currently Amended) The method of claim 3, wherein selecting comprises:

determining using the scheduler thread if any of the plurality of processes is available to process the data; and

if it is determined that one of the plurality of processes is available to process the data, choosing an available one of the plurality of processes.

6. (Previously Presented) The method of claim 1, further comprising:
recording the port-to-process assignment on an assignment list.

7. (Previously Presented) The method of claim 6, further comprising:
removing the port-to-process assignment from the assignment list upon receiving notification that the processing has been completed.

8. (Original) The method of claim 1, wherein the data comprises packet data.

9. (Original) The method of claim 8, wherein the packet data comprises a network packet.

10. (Original) The method of claim 9, wherein the packet data comprises a predetermined portion of a network packet.

11. (Original) The method of claim 9, wherein the network packet comprises an Ethernet packet.

12. (Original) The method of claim 1, wherein the one of the plurality of ports comprises a 10/100 BaseT Ethernet port.

13. (Currently Amended) An article comprising a computer-readable medium which stores computer-executable instructions for receiving data from a plurality of ports for processing by a plurality of processes, the instructions causing a computer to:

assign, with a scheduler thread, one of the plurality of ports to one of the plurality of processes, with the one of the plurality of processes executing [including]at least one thread;

determine that additional data is available from the one of the plurality of ports; and,

await notification by the process that processing has been completed for the additional data prior to re-assigning the one of the plurality of ports to one of the plurality of processes.

14. (Previously Presented) The article of claim 13, wherein the article further comprises instructions causing a computer to:

determine if data is available from one of the plurality of ports.

15. (Currently Amended) The article of claim 13, wherein the article further comprises instructions causing a computer to:

assign, with the scheduler thread, one of the plurality of ports to one of the plurality of processes, with the one of the plurality of processes executing at least one thread, using the scheduler thread to select one of the plurality of processes.

16. (Currently Amended) The article of claim 15, wherein the instructions to select one of the plurality of processes comprises instructions causing a computer to:

determine, using the scheduler thread, if any of the plurality of processes is available to process the data; and

choose, using the scheduler thread, an available one of the plurality of processes if it is determined that one of the plurality of processes is available to process the data.

17. (Previously Presented) The article of claim 13, wherein the article further comprises instructions causing a computer to:

record the port-to-process assignment on an assignment list.

18. (Previously Presented) The article of claim 17, wherein the article further comprises instructions causing a computer to:

remove the port-to-process assignment from the assignment list upon receiving notification that the processing has been completed.

19. (withdrawn) A processor comprising:

a microengine for executing threads, the threads including a receive scheduler thread and receive processing threads;

a bus interface for receiving data from a port, the bus interface for indicating to the receive scheduler whether the port has data available for processing by one of the receive processing threads; and

the receive scheduler thread assigning the port to one of the receive scheduling threads if the bus interface has indicated that the port has available data and directing transfer of the data to the assigned one of the receive processing threads for processing, the receive scheduler thread inhibiting the assignment of the port to one of the receive processing threads for the processing of new data until the assigned one of the receive processing threads has completed the processing of the data.